

4/28/86

CRITICAL THINKING FILE

There is, in many sports, a clear financial advantage for the playoff series to be as many games as possible. There is more television coverage and greater advertising revenues for the networks, and often the more games, the more money for the players. There is thus a potential for corruption. Test the corruption hypothesis statistically. The most conservative assumption is that both teams are equally matched; to the extent that this is not true, the series should be shorter. It is then an easy matter to determine how frequently playoff series ought to be of maximum length and to compare with the statistics. We will have to note when the conventions change -- three game series becoming five game series and so on; when television revenues become available; how much the payment to players increases with time, etc. This should be done separately for baseball, basketball and other major sports.

4/28/86

CRITICAL THINKING FILE:

Fermi's calculation on great generalship.

9/2/86

NUCLEUS RESEARCH FILE: Carl: COURSE

A number of Olympic medals per year normalized by national population.

9/2/86

h/e
COURSE: Carl: NUCLEUS

General Motors has dropped its interest rates on car loans to 2.9%. Chrysler immediately followed by lowering its rate to 2.3%. This is what many news organization reported on television, but the 2.9% rate applied for 3 years and the 2.3% rate only for 2 years. This nuance was not reported in many television news programs, but the nuance potentially reverses the comparative ranking. The omitted detail turns out to be the key point. This is not a rarity; in fact, it is the central point in much news reporting -- the essential information required to reach the truth about a matter is omitted.

-- August 29, 1986

9/2/86

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CLASS PROJECT: Carl

Each person chooses a historical confrontation between two opposing ideologies which has the fervor of the current confrontation between the United States and the Soviet Union. What lessons may we draw for our own time?

9/2/86

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COURSE: Carl

What are the messages in cigarette commercials and advertisements?
Virginia Slims, for example, or "I'd walk a mile for a Camel."

8/21/86

COURSE

NUCLEUS: Carl

Isn't it remarkable that the Tobacco Institute is able to find scientists whose research shows conclusively that you suffer no injury by breathing the tobacco exhaled by others; and who somehow fail to find the correlation between smoking and half a dozen lethal diseases that every other clinician has no difficulty in discovering? How does it work? Is the Tobacco Institute a place where scientists supported by the tobacco industry do their research? Does it hand out money to compliant researchers at universities or in the pharmaceutical industry? Does it find the few scientists whose findings are supportive of the tobacco industry and then support them, or does it support them first and then their findings are released? If the vast majority of independent scientists think that the danger of cigarette smoking is so clearly demonstrated, how can it be that most of the Tobacco Institute scientists don't reach the same conclusion? Just statistically it's surprising if 99% of the findings in academic and hospital studies show that tobacco smoking is harmful, shouldn't at least, say, half of the Tobacco Institute's researchers reach the same conclusion? How can these anomolous results be understood, except to hypothesize scientific mercenaries?

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for course
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make notes file for course

8/25/86

COURSE FILE: Carl

"Two teams that really don't care about each other." NFL football
preseason game commentary, Cowboys vs. Steelers, August 22, 1986.

Does it mean they're indifferent or antagonistic? It's like not
believing in God: two fundamentally contradictory ideas described by the
identical phrase.

4/28/86

CRITICAL THINKING FILE:

"Law of averages." He's "due" for a hit.

4/28/86

CRITICAL THINKING FILE

Which governments are better? To answer this we must first ask what is the function of government, what is it supposed to do, how did it come about, or was there a continuous transition from troops of primates? Hobbes, Rousseau, Locke, The Social Contract. The Declaration of Independence; "Life, liberty and the pursuit of happiness," are stated to be the functions of government. Note that the order is of some significance.

2/20/86

SENIOR SEMINAR FILE

Revive the collision physics file.



4/28/86

CRITICAL THINKING FILE:

What are the overwhelming United Nations votes of the last ten years? "A decent respect for the opinion of mankind . . ."

4/28/86

COURSE FILE
CRITICAL THINKING:

The abortion issue: compare brain death with brain birth.

5/15/86

COURSE FILE:

Misperceptions in television advertising: For example, "more pain-killing ingredients than in the competition."

6/3/86

COURSE FILE:

"You're another" as the defense of an argument.

Who benefits? As a test of a proposal.

6/10/86

COURSE FILE:

Consider not just basketball and baseball games, but Senate votes:
Does it come about that the override of presidential vetoes occurs by
one vote more often than would be expected by chance?

6/10/86

COURSE FILE:

Early lecture on the Copernican principle.

6/23/86

COURSE FILE:

Course Problem:

Francis Gary Powers was killed when the traffic helicopter he was flying crashed in Los Angeles. How many weather and traffic helicopters have crashed in California in the last twenty years? How many such flights have there been? Is there any reason on statistical grounds to think that this was not an accident? Can statistical arguments be valid in a situation like this?

7/14/86

COURSE FILE:

Statistics of small numbers.

7/14/86

COURSE FILE:

Zero sum vs. non-zero sum games. Prisoner's dilemma. Life on Earth has a very powerful non-zero sum aspect to it: consider the plants and the animals and many other cases. Are there non-zero sum board games? Sports? Think about love. Think about international relationships. In an age of nuclear weapons, clearly non-zero sum thinking must be encouraged. What about a role-playing prisoner's dilemma session? Golf, bowling, etc. But these are intermediate character circumstances; your opponent does not lose if you succeed, but he does not win either. Cooperative sports such as relays in which you are running against your previous record not against the competing team. Nick says non-zero sum game shows are PASSWORD and \$10,000 PYRAMID. Also, consider my scheme of having one dolphin teach a language to another dolphin with rewards for both every time something is successfully communicated.